

What is claimed is:

1. A rolling bearing comprising an inner ring and an outer ring made of a bearing steel, a carburized steel or a carbon steel for mechanical structures, and a plurality of rolling elements mounted between said inner ring and said outer ring, wherein to the surface layer of at least one of said inner ring and said outer ring, a compressive stress of not less than 200 MPa is imparted by heat treatment including carbonitriding and induction hardening.
2. A rolling bearing as claimed in claim 1 wherein among said inner and outer rings, one that has been subjected to said heat treatment has a tempering hardness at 500 °C of not less than Hv 550 in the surface layer thereof.
3. A rolling bearing as claimed in claim 1 or 2 wherein among said inner and outer rings, one that has been subjected to said heat treatment has a prior austenite grain diameter of not less than Gc 10 in the surface layer thereof.
4. A rolling bearing as claimed in any of claims 1-3 wherein said heat treatment includes high-

temperature tempering between carbonitriding and induction hardening.

5. A rolling bearing as claimed in any of claims 1-4 wherein said rolling elements are rollers and are arranged in a full compliment arrangement.

6. A rolling bearing as claimed in any of claims 1-5 mounted in a rocker arm of an automobile.